

an insulation layer on said semiconductor substrate, said insulating layer having a thickness of between 50 nm and 200 nm;

a semiconductor layer configured on said insulation layer;

a first doped terminal zone and a second doped terminal zone formed in said semiconductor layer; and

a drift zone formed in said semiconductor layer;

said drift zone formed between said first doped terminal zone and said second doped terminal zone; and

at least one of said first doped terminal zone and said second doped terminal zone directly adjoining said semiconductor substrate.